

Title: User Electrical Equipment Inspections

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Revision: final paragraph correction - *user* (not sector management) responsible for overtime

Policy

To protect the safety of personnel and equipment, all electronic and electrical equipment at the APS shall be inspected to ensure compliance with NEC, OSHA, DOE, and ANL regulations. This requirement for inspections includes all electrical equipment brought to the APS by users. The ANL standards are found in the ANL ES&H Manual, Section 9.3.2.

All electrical equipment that is brought to the APS by APS users must be inspected by an Argonne Designated Electrical Equipment Inspector (DEEI) before the equipment can be used. The APS has personnel that have been trained to be DEEIs.

In some cases, this inspection will be quite simple, (e.g., if the equipment has already been inspected by a Nationally Recognized Testing Laboratory (NRTL) and is used for its designed purpose). Other equipment will require a more thorough inspection (this may include NRTL inspected equipment if it is assembled into apparatus with other components). Additional details about the inspections (including what type of equipment has to be inspected, inspection criteria, and a list of DEEIs) may be found in the documents available at:

http://www.aps.anl.gov/Safety_and_Training/Electrical_Safety/index.html.

The need for an electrical equipment inspection will be noted through the APS Experiment Safety Assessment Form (ESAF). It is the responsibility of the user and the beamline staff to contact a DEEIs or the User Safety Officer and arrange for an inspection at least three (3) days in advance. Inspections will normally be performed during regular business hours. Requests with less than three days notice or for inspections not during regular business hours will be dealt with on a case-by-case basis.

If user electrical equipment is found to be deficient it may not be used at the APS. The Sector and the APS will assist the user in attempt to rectify any deficiencies in the equipment so that it may be used at the APS. Overtime costs and the cost for any APS supplied parts for the repair will be the responsibility of the user. Users with

electrical equipment that has not been inspected by a DEEI will not be allowed to proceed with their experiments and may result in the loss of the user's scheduled beamtime.

Procedure

1 Introduction – Purpose, Scope, and Applicability

The APS has established a user electrical equipment inspection process to ensure that all user electrical/electronic equipment is safe and meet APS/ANL safety standards. This procedure describes the process for making the arrangements for inspections but not the specific technical standards of the inspection.

2 Arranging for the inspection of user electrical/electronic equipment

The need for an electrical equipment inspection will be noted through the APS Experiment Safety Assessment Form (ESAF). When a user checks the Electrical Equipment, High Voltage, or Electric Furnace checkboxes on the Equipment page of the ESAF, notification will be sent to the DEEIs that an inspection will be needed.

Scheduling inspections

It is the responsibility of the user and the beamline staff to arrange with either one of the DEEIs or the User Safety Officer for the actual date and time of the inspection. This notification is to be given at least three (3) days in advance of the actual inspection date. The APS will make an effort to honor requests that are received less than three (3) days in advance but due to work assignments and scheduling conflicts may not be able to complete the inspection at the date and time requested. In this case the experiment may not be used until a DEEI is available, the inspection is completed, and the equipment is approved for use by the DEEI.

Off- hours inspections

Requests for off-hours inspections (weekday evenings and nights or weekends) will be handled on a case-by-case basis. If notification of a request for off-hours inspections is given less than three (3) days in advance of the requested date the user will be responsible for any overtime charges. DEEI coverage cannot be guaranteed on a timely basis during weekend. If an experiment is to begin on the weekend, it is strongly recommended that the user has the equipment available for inspection before the weekend.